

### **REMARKS**

In response to the above-identified Final Office Action, Applicants amend the Application and seek re-consideration in view of the following remarks. In this Response, Applicants amend claims 1, 7, and 12. Applicants do not cancel or add any claims. Accordingly, claims 1-18 and 21-22 remain pending in the Application.

#### **I. Claim Objections**

Claims 1, 7, 16-17, and 21-22 stand objected to because the Patent Office alleges that the elements of “expected computer code having a plurality of lines based on the model” is not supported by Applicants’ specification. Applicants respectfully traverse the objection.

In making the objection, the Patent Office states that:

According to the Specifications, the model file 101 is a file containing constructs of a (e.g., SIMULINK) model and can be realized into visual and interconnected block representing a system (see pg. 6, 2<sup>nd</sup> and 3<sup>rd</sup> para). It is by conversion that an Autocode generator 106 yields the actual source code having a plurality of lines; but this source code is ‘generated computer code’ which is to be matched against the model constructs. (Paper No./Mail Date 20070806, page 2).

Applicants respectfully submit that the Patent Office is not properly characterizing claim 1 of the present Application.

Claim 1, as amended, defines a method for verifying computer code generated from a model file of a system (*see* Preamble); meaning that the model file is used to generate computer code using, for example, SIMULINK or other similar program as a model module (*see* Applicants’ paragraph [0025]). The same model file is processed (using, for example, code verification module 102) to determine an expected computer code for the model file (*see* Applicants’ paragraph [0024]). The generated computer code and the expected computer code are compared to each other to determine if they match (*see* Applicants’ paragraphs [0034]-[0036]). If the generated computer code and the expected computer code do not match, an error message is transmitted (*see* Applicants’ paragraph

[0049]). Thus, claim 1 defines a method where actual computer code is generated from model code or code of a model. The model code is then processed to determine an expected computer code so that both actual computer code and expected computer are generated. The actual code and the expected code are compared to determine if they match, or in other words, are compared to verify that the actual code is correct. Therefore, Applicants submit that the Patent Office's allegation that the expected computer code is matched against the model constructs is simply not correct. Accordingly, Applicants respectfully request withdrawal of the objection of claims 1, 7, 16-17, and 21-22.

## **II. Claims Rejected Under 35 U.S.C. §102**

Claims 1, 7, and 12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,983,446 issued to Charisius et al. ("*Charisius*"). Applicants traverse the rejection.

To anticipate a claim, the cited reference must disclose each and every element of the rejected claim (*see* MPEP § 2131). Among other elements, independent claim 1 defines:

a method for verifying a generated computer code  
...generated from a model file comprising:

processing the model file to determine an expected computer  
code...based on the model file; and

comparing the generated computer code to the expected  
computer code to determine if the generated computer code and the  
expected computer code match (emphasis added).

Applicants submit that *Charisius* fails to disclose at least these elements of claim 1.

In making the rejection, the Patent Office characterizes *Charisius* as disclosing each of the limitations of claim 1; however, Applicants submit that fails to disclose two different computer codes (i.e., generated computer code and expected computer code) generated from the same model file being compared to one another to verify that one of the computer codes is correct.

*Charisius* discloses a software development tool that provides:

simultaneous round-trip engineering, i.e., the graphical representation 204 is synchronized with the textual representation 206. Thus, if a change is made to the source code 202 via the graphical representation 204, the textual representation 206 is updated automatically. Similarly, if a change is made to the source code 202 via the textual representation 206, the graphical representation 204 is updated to remain synchronized. There is no repository, no batch code generation, and no risk of losing code. (Col. 5, lines 50-60).

Therefore, Applicants submit that *Charisius* discloses a system and method for automatically updating a graphical representation of source code when changes are being made to the source code itself and updating the source code when changes are being made to the graphical representation of the source code. In other words, *Charisius* discloses a system where the source code is automatically updated as the model is changed and the model is updated as the source code is changed. Thus, Applicants submit that there is only one computer code being generated in *Charisius*' system and method.

By contrast, claim 1 recites a method where generated computer code and expected computer code are compared to one another to verify that the generated computer code is correct. That is, a second computer code (expected computer code) is being generated and compared against the first computer code (generated computer code) to verify that the first computer code is correct, which is completely different from a system and method for keeping a model and a source code in synch with one another. Therefore, for at least these reasons, *Charisius* fails to disclose each and every element of claim 1. Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 1.

Applicants submit that independent claims 7 and 12 each recite elements similar to claim 1. Therefore, Applicants submit that claims 7 and 12 are not anticipated by *Charisius* at least for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 7 and 12.

**IV. Claims Rejected Under 35 U.S.C. §103**

Claims 2-6, 8-11, 13-18, and 21-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Charisius* in view of the ordinary skill in the art. Applicants traverse the rejection.

To render a claim obvious, the cited reference must teach or suggest each and every element of the rejected claim (see MPEP § 2143). Claims 2-6 and 21 depend from claim 1, claims 8-11 and 22 depend from claim 22, and claims 13-18 depend from claim 12 include all of the elements of their respective independent claims. Applicants have discussed above the failure of *Charisius* to teach or suggest each and every element of independent claims 1, 7, and 12, and submit that such discussion is equally applicable to claims 2-6, 8-11, 13-18, and 21-22 because of their respective dependencies. The Patent Office relies on the ordinary skill in the art to cure the defects of *Charisius*; however, Applicants submit that the ordinary skill in the art fails to cure such defects.

In making the rejection, the Patent Office does not rely on the ordinary skill in the art a teaching or suggesting “comparing the generated computer code to the expected computer code to determine if the generated computer code and the expected computer code match,” as recited in each of claims 2-6, 8-11, 13-18, and 21-22 via their respective independent claims. Moreover, Applicants submit that such elements were not obvious to one of ordinary skill in the art prior to Applicants’ earliest effective date. Therefore, the ordinary skill in the art fails to cure the defects of *Charisius*. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-6, 8-11, 13-18, and 21-22.

**CONCLUSION**

In view of the foregoing, it is believed that all claims now pending are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (480) 385-5060 or jgraff@ifllaw.com.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-2091 for any fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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